

STATE OF MONTANA

Department of Agriculture, Labor and  
Industry

A. H. Stafford, Commissioner

OFFICIAL HANDBOOK

of

*The* DIVISION *of*  
HORTICULTURE

---

Issued by

GEO. L. KNIGHT

Chief Division of Horticulture

Missoula, Montana

---

March, 1930

This department has entered into an agreement with the United States Bureau of Agricultural Economics under which all state inspectors are licensed by the Federal Fruit and Vegetable Shipping Point Inspection Service. We are prepared to furnish upon request at certain points in the state joint state and federal shipping point inspection certificates on apples and potatoes and other fruits and vegetables. These certificates are accepted as prima facie evidence in all Courts of the United States and Montana.

GEO. L. KNIGHT,  
Chief, Division of Horticulture.

Missoula, Montana.

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THE TRIBUNE PRINTING CO.  GREAT FALLS, MONTANA

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# Montana Department of Agriculture, Labor and Industry

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Excerpts from Chapter 254, 17th Session Laws of 1921, relating to the Division of Horticulture.

Be it enacted by the Legislative Assembly of the State of Montana:

Section 3555. There is hereby created a department of the government of the State of Montana to be known as the "Department of Agriculture, Labor and Industry." The general purpose of said department is the promotion of the agricultural and labor interests of the State of Montana as hereafter more specifically provided.

\* \* \* \*

## GENERAL POWERS OF DEPARTMENT.

Section 3561. The Department of Agriculture, Labor and Industry shall have power and it shall be its duty:

1. To encourage and promote, in every practicable manner, the interests of agriculture, including horticulture and apiculture, domestic arts, dairying, cheese making, poultry raising, the production of wool, and all other allied industries.

2. To collect and publish statistics relating to the production and marketing of crops and live stock, and of beef, pork, poultry, fish, mutton, wool butter, cheese and other agricultural products so far as such statistical information may be of value to the agricultural and allied interests of the state.

3. To assist, encourage and promote the organization of farmers' institutes, horticultural and agricultural societies, the holding of fairs, live stock shows, or other exhibits of the products of agriculture.

4. To establish and promulgate standards for open and closed receptacles for farm products and standards for the grade and other classification of farm products.

### **Investigate Marketing.**

5. To co-operate with producers and consumers in devising and maintaining economical and efficient systems of distribution, and to aid in whatever way may be consistent or necessary in accomplishing the reduction of waste and expense incidental to marketing.

6. To have authority to maintain a market news service, including information as to crops, freight rates, commission rates, and such other matters as may be of service to producers and consumers, acting as a clearing house for information between producer and consumer.

7. To gather and diffuse timely information concerning the supply, demand, prevailing prices, and commercial movement of farm products.

8. To investigate the practices and methods of factors, commission merchants and others who receive, solicit, buy, sell, handle on commission or otherwise, or deal in grain, dairy products, eggs, live stock, vegetables, or other farm products to the end that the distribution of such commodities through such factors, commission merchants and others shall be efficiently and economically accomplished without hardship, waste or fraud.

9. To co-operate with the State College of Agriculture, the Agricultural Experimental Stations and the Federal Government to the end that all available agencies may be employed, to



the best advantage, for the betterment of the Agricultural industries of the state, for the improvement of country life and for promoting equality of opportunity for the farmers of the state.

\* \* \* \*

## DEPARTMENTAL DIVISIONS\*

Section 3563. There shall be four main divisions of the Department of Agriculture, Labor and Industry, to-wit:

The Division of Farming and Dairying.

The Division of Grain Standards and Marketing.

The Division of Horticulture.

The Division of Labor and Publicity.

The Divisions hereby created are intended for the sole purpose of promoting the logical and convenient classification of the work of the department, and nothing herein contained shall be deemed to prevent any person engaged in the work of a particular division from performing the work of another division; the Commissioner may likewise create additional divisions at his discretion.

\* \* \* \*

## DIVISION OF HORTICULTURE.

Section 3608. The Division of Horticulture. The Department of Agriculture, Labor and Industry, through the Division of Horticulture, shall enforce all of the laws of the State of Montana now in force or hereafter enacted, relating to the protection and regulation of the industry of horticulture in the State of Montana.

Section 3609. For the convenient administration of the laws of the state relative to the industry of horticulture, the Commissioner of Agriculture may divide the state into horticultural dis-

tricts, grouping the several counties in such manner as he may deem expedient.

Section 3610. For the purpose of preventing the spread of contagious disease among fruit and fruit trees, and for the prevention, treatment, cure and extirpation of fruit pests and diseases of fruit and fruit trees, and for the disinfection of grafts, scions, and orchard debris, empty fruit boxes or packages, or other suspected material or transportable articles dangerous to orchards, fruit, and fruit trees, the Commissioner of Agriculture may prescribe regulations for the inspection, disinfection or destruction thereof, which regulation shall be circulated in printed form by the Commissioner among fruit growers and fruit dealers of the State, and shall be published at least ten days in two newspapers of general circulation in the state, and shall be posted in three conspicuous places in each county in the state, one of which shall be at the county court house thereof. For further prevention of the spread of diseases dangerous to fruit and fruit trees, it shall be unlawful for any person, or persons, dealer or dealers, to allow or cause to be used a second time, any crate, box, barrel, package, or wrapping once having contained fruit or nursery stock, except that at the written request of a nurseryman, an inspector may permit boxes or packages having contained nursery stock to be thoroughly fumigated by him or in his presence, at the expense of the nurseryman, for which said inspector shall give a receipt and duly mark the box or package; otherwise the destruction of the same must be made in its entirety, and the finding of such crate, box, barrel, package, or wrapping in possession of any person or persons, dealer or dealers, other than the consignee, shall be considered prima facie evidence of a violation of this act.

The Commissioner of Agriculture or his authorized representative is hereby authorized to seize and destroy by burning, without breaking, such

crate, box barrel, package, or wrapping wherever found, and to prosecute said violator or violators.

### **Horticultural Inspectors.**

Section 3611. The Commissioner of Agriculture shall appoint inspectors of fruit pests in such number as he may deem necessary for the proper administration of the horticulture laws. Said inspectors shall be selected with reference to their knowledge and practical experience in horticulture. It shall be the duty of such inspectors to visit the nurseries, orchards, stores, packing houses, warehouses, and other places where horticultural products and fruits are kept within their respective district, and shall see that the regulations of the Department of Agriculture, Labor and Industry, and the laws of the state with reference to the disinfection of fruits, trees, plants, grafts, orchard debris and empty fruit boxes and other material shall be fully complied with. Said inspectors shall have access, at all times, to all orchards or places where horticultural products or supplies are kept or handled and shall have full power to enforce the rules and regulations of the Commissioner of Agriculture, and to order the destruction and disinfection of any or all trees, plants, fruits, or horticultural products or supplies when found to be infected.

Section 3612. The Commissioner of Agriculture shall have the power to appoint some competent and qualified person to enforce the laws of the state relative to the grading and marketing of fruits and traffic and nursery stock, the control and destruction of insect pests, fungus and bacterial diseases, to enforce the law relative to the licensing of persons engaged in the business of selling or importing fruits, trees, plants or nursery stock in this state, and to supervise and direct the horticulture inspection service and the dissemination of horticultural knowledge.

Section 3613. The Commissioner of Agriculture, subject to the approval of the State Board of Examiners, in special instances, may employ a specialist for the purpose of investigating the source, control and destruction of insect pests, fungus and bacterial diseases of orchards, trees, shrubs, plants or nursery stock in this state; such employment shall be for a period not exceeding six months in any one year, and shall be on such terms as may be agreed upon by the Commissioner of Agriculture and the State Board of Examiners.

### Nursery Stock Inspection.

Section 3614. It shall be the duty of every person or persons, corporation or corporations, who sell or deliver to any person or persons, corporation or corporations, any trees, plants, vines, scions, or grafts not previously inspected under the provisions of this act, to notify the Commissioner of Agriculture, whose duty it shall be to notify the inspector of said district wherein such vines, etc., are to be delivered, at least five days before said goods are to be delivered, giving the date and nursery or railroad station where said trees, plants, grafts, scions, etc., are to be delivered, together with the name of the party or parties who are to receive the same. It shall be the duty of the inspector receiving said notice to inspect the said trees, plants, grafts, scions, etc., as soon thereafter as practicable, and if the same be found free from any and all diseases and pests, he shall so certify, and attach a certificate of inspection to each lot or bill of trees, grafts, plants, scions, etc., which said certificate must contain a list of the said trees, grafts, scions, vines or plants so inspected. But if any of the trees, grafts, scions, vines, or plants so inspected shall be found to be diseased or infested with any of the pests, as prescribed by the Commissioner of Agriculture, then the inspector shall order the

disinfection or destruction of said trees, grafts, scions, vines, etc., so diseased or infested, together with all boxes, wrapping, or packing pertaining thereto; provided, that when any fruit or nursery stock is condemned by an inspector. said inspector shall notify the owner thereof, who may appeal to the Commissioner of Agriculture, whose decision shall be final, and charge and collect the sum of ten dollars for the disinfection and inspection of each carload of said nursery stock, and a proportionate sum for less than carload lots, as fixed by the Commissioner; provided that the Commissioner of Agriculture shall have power to designate certain places as quarantine stations, where all nursery stock brought into the state shall be inspected and disinfected; provided, that the provisions of this act shall not apply to any plants known as greenhouse plants and grown under glass.

### **Fruit Inspection Fee**

For the inspection of fruit, a fee of two cents per box or package, with a maximum fee of five dollars for each separate lot or car shall be charged and collected. The inspector shall collect such fees and shall not give certificates of inspection until fees are paid.

Section 3615. If any person or persons in charge or control of any nursery, orchard, store-room, packinghouse, or other place where horticultural products or supplies are handled or kept shall fail or refuse to comply with the rules and regulations of the Commissioner of Agriculture, shall fail or refuse to comply with the rules and eased or infected trees, plants, scions, vines, grafts, shrubs, or other horticultural supplies or products, when ordered so to do by the inspector of such district, he shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in any sum not less than twenty-five dollars nor more than three hundred dollars.

## Duty to Notify Inspector of Infection.

Section 3616. It shall be the duty of every owner or manager of every orchard, nursery, storeroom, packinghouse, or other place where horticultural products or supplies are kept or handled, which shall become diseased or infested with any injurious insect or pest, immediately upon discovery of the existence of such disease or pest, to notify the inspector of said district of the existence of the same. It shall be the duty of such owner or manager, at his own proper expense, to comply with and carry out all the instructions of said inspectors for the eradication of any disease or pest. Any person who shall fail or refuse to notify said inspector, as herein provided, or who shall fail or refuse to comply with the instructions of said inspector for the eradication of any disease or pest, shall be deemed guilty of a misdemeanor, and, upon conviction, thereof, shall be fined in any sum not less than twenty-five nor more than three hundred dollars.

## Power of Condemnation.

Section 3617. If any person, firm or corporation, or the legal representative of any person, firm or corporation, owning any orchard, tree, shrub or plant which is known to be infected with any injurious insect pest or disease and which thereby becomes a menace to the agricultural or fruit industry of this state shall fail, refuse or neglect to comply with the instructions of the Department of Agriculture, Labor and Industry, or its authorized representatives, for the eradication or control of such injurious insect pests or disease or the destruction of said infected orchard, tree, shrub, or plant, if in the judgment of said Department, or its authorized representative, such destruction shall be deemed necessary, within the time specified by the said department, or its authorized representative, the said Commissioner of Agriculture, or his authorized repre-



sentative is hereby empowered to condemn, remove, or destroy any such orchard, tree, shrub or plant and if such owner or his legal representative shall fail, neglect or refuse to pay the cost of such removal or destruction of such orchard, tree, shrub or plant, within thirty days after due notice has been given by mailing to the owner at his last known post office address, then said cost and expense shall become a lien on the land of the owner and shall be added by the county treasurer to the taxes upon said property and collected as other taxes.

Section 3618. Every person who for himself or as agent for any other person or persons, corporation or corporations, transportation company, or common carrier, shall receive, deliver or turn over to any person or persons, corporation or corporations, any trees, vines, shrubs, nursery stock, scions, grafts and fruits without first having attached an inspector's certificate, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in a sum not less than twenty-five dollars nor more than three hundred dollars.

#### Nurseryman's License.

Section 3619. It shall be unlawful for any person, firm, or corporation to engage in, conduct, or carry on the business of selling, dealing in, or importing into this state for sale or distribution, any nursery stock, or to act as agent, salesman, or solicitor for any nurseryman or dealer in nursery stock, or to solicit orders for the purchase of nursery stock, without first having obtained from the Commissioner of Agriculture and having in force a license to do so, and it shall be unlawful for any person to falsely represent that he is an agent, salesman, solicitor, or representative of any nurseryman or dealer in nursery stock. No license shall be issued until the applicant therefor shall have attested to the application for a license furnished upon request

by the Commissioner of Agriculture, paid the fee, and furnished the bond, as in this act required. The license fee shall be twenty-five dollars per annum for nurserymen and dealers in nursery stock, and all agents, salesmen and solicitors for licensed nurseries shall be granted salesmen's certificates free of charge. All licenses shall be in the name of the person, firm, or corporation licensed, and shall show the purpose for which issued, the name and location of the nursery or place of business of the nurserymen or dealer licensed or represented by the agent, salesman, or solicitor. All applications for a license must be in the name of the person, firm, or corporation to be licensed, also it must show the nursery acreage represented by the applicant, and such other information as is desired by the Commissioner of Agriculture. All licenses shall bear the date of issue and shall expire the first day of July next following the date of issue; provided, that all licenses in force at the time of the taking effect of this act shall continue in force during the term for which they were issued, unless sooner revoked, and any holder of such license applying for a license under this act prior to the first day of July next following the expiration of his former license shall be required to pay therefor only the proportional part of the fee required for the annual license, for the remaining portion of the year until the first day of July next following.

Every nurseryman or dealer in nursery stock, applying for a license under this act, shall make, execute, and file with the Commissioner of Agriculture a bond running to the State of Montana, in the sum of one thousand dollars, with surety or sureties to be approved by the Commissioner of Agriculture, conditioned for the faithful compliance by the applicant with all of the provisions of this act and the laws of the State of Montana relating to the sale, disposition, delivery, inspec-



tion and disinfection of nursery stock grown, dealt in, imported, sold, handled, or delivered by him during the term of the license applied for, and the term or terms of renewal of the same, and conditioned further that all nursery stock sold or delivered by him during said term shall be true to name, age, and variety as represented, and free from the diseases and pests required to be guarded against by the horticultural laws and regulations of the State of Montana.

Every licensed nurseryman or dealer in nursery stock who shall have complied with the provisions of this act, shall be entitled, upon the expiration of his license or any renewal thereof, by the payment of the fee of twenty-five dollars on or before the date of the expiration of his license, or any renewal thereof, to have his license renewed for the ensuing year ending July 1st, so long as the bond originally given in compliance with the provisions of this section shall remain in force.

A license may be refused at any time, or revoked when the person, firm, or corporation applying therefor has been adjudged bankrupt, insolvent, or guilty of fraud or deceit by any court of competent jurisdiction.

The cancellation or revocation of, or the withdrawal of the sureties from any bond filed in accordance with the provisions of this act, shall ipso facto work a suspension of the license of the principal of said bond, and the license of all agents, salesmen and solicitors employed by and representing him until such a time as such principal shall furnish a new bond to be approved by the Commissioner of Agriculture.

Upon complaint in writing, verified under oath by the complainant, being made to the Commissioner of Agriculture, that the holder of any license in this act provided for has violated or failed to comply with the provisions of this act

or the laws of the State of Montana relating to horticulture, the Commissioner of Agriculture, if in his judgment the complaint is justified, may revoke the license of the nurseryman complained of.

### **Misrepresentation of Nursery Stock.**

It shall be unlawful for any person to falsely represent or to misrepresent the name, age, variety, or class of any nursery stock sold or offered for sale, or to falsely represent or state that any nursery stock offered for sale, sold, or delivered was grown in or came from a certain nursery or locality, when in fact such nursery stock was grown in or came from another location or nursery, or to deceive or defraud any person in the sale of any nursery stock by substituting inferior or different varieties or ages from those ordered, or to wilfully or intentionally bring into this state, or to offer for sale or distribution within this state, or to ship, sell, or deliver upon any sale any nursery stock that is infected or infested with any disease or insect dangerous to the horticultural interests of the state, and in case of such misrepresentation, false representation, deceit, fraud, or substitution, shall be subject to punishment as provided by the statute for misdemeanor, and shall be liable to the person, firm, or corporation damaged or injured thereby, the amount of all damage sustained to be recovered in a civil action in any court of competent jurisdiction; and any person, firm, or corporation suffering damage by reason of having purchased any nursery stock of a licensed nurseryman, or dealer in nursery stock, delivered within this state, or shipped from a point within or without this state for delivery within this state, or by reason of the destruction of such infected or infested nursery stock by or under the direction of any horticultural inspector, as in this act provided or by reason of receiving any nursery stock which is not true to name, age, variety, or class

as represented by the nurseryman, dealer, agent, salesman, or solicitor selling the same, or as ordered, shall have recourse against the bond filed by the licensed nurseryman or dealer from whom such stock has been purchased, for all damages sustained, including damages in case of misrepresentation, deceit, fraud, or substitution, which damage may be recovered at the suit of the party injured against the nurseryman or dealer causing the damage and the sureties on such bond, in any court of competent jurisdiction; provided, no liability shall attach on such bond by reason of nursery stock being untrue to name, age, variety, or class, unless at least five per cent of any variety ordered shall prove untrue to name, age, variety, or class.

It shall be the duty of all nurserymen or dealers in nursery stock, and all salesmen, solicitors, and agents therefor, to give to every person ordering any nursery stock a duplicate copy of such order which shall show:

1. The name and location of the nursery where such stock is grown.

2. The name of the nurseryman from whom ordered, and the name of the solicitor, salesman, or agent taking such order.

3. The date of the order and when delivery is to be made.

4. The number, name, age, and price of such variety of tree or plant ordered.

In the event of the shipment into this state from any point without this state of any nursery stock, by a person, firm, or corporation not licensed to do business in this state, as in this act provided, it shall be the duty of the purchaser or person receiving such nursery stock to have the same inspected by a horticultural inspector, in the same manner as is required upon the delivery of nursery stock sold and delivered by a licensed

nurseryman or dealer in nursery stock within this state, and to pay an inspector's fee of ten per cent of the invoice price of such shipment; provided, that the minimum fee for such inspection shall be fifty cents and the actual and necessary traveling expenses of the inspector making the inspection; and provided, further, that no inspection fees shall be collected in excess of the regular inspection fees, where such stock is shipped to a person, firm, or corporation, holding a Montana license, as provided in this act.

Licenses granted under this act shall be for one year, unless revoked for any violation of this act.

### Notice of Nursery Stock Shipments

Section 3620. It shall be the duty of every person, firm, or corporation, licensed to do business under this act to notify the Commissioner of Agriculture of his intention to ship an invoice of fruit trees, plants, or nursery stock not previously inspected under the provisions of this act, from one point to another in this state, or from any point without this state into this state. The said notice shall contain the name and address both of the consignor and consignee, and the list of the goods to be shipped, the freight or express office at which the goods are to be delivered, and the name or title of the transportation company from whom the consignee is to receive the goods. Such notice shall be mailed at least five days before the day of shipment.

Section 3621. Any person or persons who shall receive and accept any nursery stock, fruit trees, plants, vines, scions, cuttings, grafts, etc., that have not been inspected by a duly appointed inspector of the Commissioner of Agriculture, and shall use or dispose of said nursery stock, fruit trees, vines, plants, scions, cuttings, grafts, etc., without first notifying the inspector and furnishing him an opportunity to examine, and, if neces-

sary, fumigate said nursery stock, will be deemed guilty of a misdemeanor, and will be subject to fine as further provided in this act.

Section 3622. Every person who, for himself or as agent for any other person or persons, corporation or corporations, transportation company, or common carrier, shall deliver or turn over to any persons or persons, corporation or corporations, any trees, vines, shrubs, nursery stock, scions, and grafts, without first having attached the inspector's certificate (as provided in section 3618 of this act), shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not less than twenty-five dollars nor more than three hundred dollars.

Section 3623. No person or persons, corporation or corporations, shall be liable to any other person or persons, corporation or corporations, for any damage to any trees, vines, or shrubs, nursery stock, scions, or grafts, by reason of the same being held to wait the certification of the inspector (as provided in section 3618 of this act.)

Section 3624. All nursery stock, trees, plants, vines, and cuttings grown or growing within the State of Montana, used for filling orders, shall after said stock shall in the manner and at the times designated by the Commissioner of Agriculture, and before the same shall have been packed for delivery, be inspected by a duly appointed inspector, and shall be disinfected by fumigating or other method, when, in his judgment such is necessary. After such inspection if it be found that said nursery stock, trees, plants, vines, and cuttings are clean and free from insects and fungi pests, he shall issue his certificate to said nurseryman, and said certificate shall entitle him to use said stock, so inspected and disinfected, for filling orders for the next current delivery; and said inspector's certificate shall be furnished to those entitled to them at a price not to exceed forty cents per hundred.

Nurseries shall give to the Commissioner of Agriculture five days' notice of the time when said stock shall be ready for inspection under the provisions of this act.

Section 3625. Any person or persons, corporation or corporations, transportation companies, or common carriers, violating any of the provisions of this act, shall be deemed guilty of a misdemeanor, and fined in the sum of not less than twenty-five dollars nor more than three hundred dollars.

Section 3626. It shall be unlawful for any person, firm, or corporation to import into this state, sell, barter, or otherwise dispose of, or offer for sale, or have in his possession for the purpose of sale or barter, any fruit which is or has been infested with San Jose scale, or other scale insect pests, or the larvae of the codling moth, and the fact that any fruit bears the mark of any such scale insect, or is worm eaten by the larvae of the codling moth, shall be deemed conclusive evidence that the fruit is infected within the meaning of this section, and may be condemned and confiscated by any legal horticultural inspector; provided, that nothing in this section shall be construed to prevent the growers of such infected fruit from manufacturing the same into a by-product, or selling and shipping the same to a by-product factory, after having first obtained a permit so to do from a horticultural inspector.

Validity and construction of statutory regulations as to infected orchards, see notes in 43 L. R. A. (N. S.) 1080; L. R. A. 1915F, 894.

### May Establish Quarantine.

Section 3627. The Montana Commissioner of Agriculture is hereby authorized and empowered to establish a quarantine over any orchard or place where fruits are grown or kept, that is infested with any injurious disease or insect pest;



and said commissioner may establish such rules and regulations governing such quarantine, and regulating or restricting the use of such fruits upon the premises, or the shipment or disposition of the same, as he may deem necessary to prevent the spreading of such disease or diseases or insect pests.

Any person who shall violate the provisions of this section, or the rules and regulations established by said Commissioner of Agriculture, or who shall ship or dispose of any diseased or infested fruit or fruit products in violation of the order of said commissioner, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in the sum of not less than twenty-five nor more than three hundred dollars.

#### **May Collect As Taxes.**

Section 3628. Whenever, under the direction or regulations of the Montana Commissioner of Agriculture, any money is expended by said board for the purpose of eradicating any disease or insect pest from any orchard or other place where fruits are grown or kept, said commissioner, through its representative, shall notify the owner of such orchard or premises in writing of the amount so expended plus an additional charge of twenty-five per cent of the amount so expended. Said notice shall be mailed to the last known address of such owner, and if such owner shall fail to pay the amount so expended by said commissioner plus an additional charge of twenty-five per cent of the amount so expended, within thirty days of the time such notice is sent, then and in that event the commissioner shall file a statement, verified under oath by himself or his representative, with the county treasurer in the county wherein said money shall have been expended. Said statement shall set forth the amount so expended, together with the correct description of the property on which such money was ex-

pended as it appears on the assessment roll of the county. The county treasurer shall add the total amount as set forth in said statement to the taxes upon said property, and shall collect the same as provided by the law for the collection of taxes for state and county purposes.

Section 3629. The county treasurer in any county where any money is collected as provided in the preceding section, shall, on or before the first day of February of each year, remit the amount to the state treasurer, who shall deposit same to the credit of the general fund of the state.

Section 3630. It shall be the duty of the Commissioner of Agriculture, or his authorized representative or inspector, to inspect all apples packed for sale or shipment pursuant to the provisions of Sections 4265 to 4272 of this code, and said commissioner is hereby authorized to certify to the grade and pack thereof, and to charge the owner, packer or shipper of any such apples a fee to be fixed by said Commissioner of Agriculture for such services, and said commissioner may make such rules and regulations regarding such inspection, not in conflict with the laws of the state, as he may deem proper.

Section 3631. Whenever the Governor of the State has good reason to believe that any pest, gypsy moth, brown tail moth, Mediterranean fruit fly, potato wart, potato canker, black scab, potato eelworm, pea weevil, alfalfa weevil, alfalfa blight, flax canker, or flax wilt or other fruit or plant disease or insect pest dangerous or inimical to the horticultural or the agricultural industry exists in certain localities in another state, territory or country, or that conditions exist that render domestic horticultural stock or agricultural crops or plants likely to become diseased, he must by proclamation designate such localities and prohibit the importation therefrom of any



tubers, plants, nursery stock, fruit or seeds or agricultural crops, plants or seeds likely to introduce or spread infection, contagion or insect pests into the state except under such restrictions as he, after consulting with the State Board of Horticulture, the Commissioner of Agriculture or the State Entomologist may deem proper.

Section 3632. Whenever the Governor of this state has good reason to believe that any pest, gypsy moth, brown-tail moth, potato wart, potato canker, black scab, potato eel-worm, pea weevil, alfalfa weevil, alfalfa blight, flax canker, flax wilt, or other plant disease or insect pest, dangerous or inimical to the agricultural or horticultural industry, exists within any county or locality within the state, it shall be specifically understood that he has authority to quarantine any county, locality or ranch, and it shall be his duty to prescribe and enforce such rules and regulations as may be necessary to prevent the movement of any designated articles or materials whatever across the boundaries of such quarantined counties, districts, localities or ranches, and for the control and eradication of such pests and diseases.

Section 3633. Any person, firm or corporation who after publication of such proclamation knowingly receives in charge of any tubers, plants, nursery stock, fruit, seeds or agricultural crops, plants or seeds from any of the prohibited districts and transports, conveys, sells or uses the same, within the limits of this state, is guilty of a misdemeanor and punishable by a fine not less than ten dollars or more than five hundred dollars, and is further liable for any and all damages and loss that may be sustained by any person by reason of the importation or transportation of such prohibited and diseased tubers, plants, nursery stock, fruits, seeds, or agricultural crops, plants or seeds.

## REGULATIONS OF THE DIVISION OF HORTICULTURE, MISSOULA, MONTANA

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By virtue of the provisions of Section 39, Chapter 216, 17th Session Laws of 1921, these regulations have the force of law.

**Definitions.** For the purpose of these regulations the following terms shall include and be construed, respectively, to mean:

**Commissioner.** The Commissioner of the Department of Agriculture, Labor and Industry, Helena, Montana.

**Chief.** The Chief of the Division of Horticulture, Missoula, Montana.

**Nursery Stock.** Fruit, shade and ornamental trees (deciduous or evergreen), shrubs, vines, plants, roots, scions, cuttings or other portions of plants or shrubs or trees designed to be replanted in Montana for home or commercial use, except those classed as greenhouse plants to be grown under glass.

**Insect Pests and Diseases.** Insect pests and diseases injurious to plants and plant products of this state, including any of the stages of development of such insect pests and diseases.

**Regulation I.** All nursery stock brought into Montana, by any transportation company, shall be inspected or fumigated at the point of delivery. provided said point of delivery shall be one of the points designated by the Commissioner as quarantine stations; but if any shipments shall be filled for delivery at any other points in Montana, they shall be inspected and fumigated at

the quarantine station on the line of such transportation company next preceding or nearest the point of delivery to which they are billed.

**Regulation II.** All nursery stock brought into Montana by wagon or automobile shall be inspected or fumigated at the nearest quarantine station to the point where such nursery stock enters the state.

**Regulation III.** Importers or owners of nursery stock who shall desire to have such stock inspected, and if necessary fumigated, at some point in Montana other than the regular quarantine stations may have such inspection or fumigation made at point designated by such importer or owner; provided, however, that such importer or owner shall pay all charges and expenses of inspection and fumigation, same to be paid before certificate is granted.

**Regulation IV.** By fumigation it is to be understood treatment by hydrocyanic gas. This treatment shall be done as follows: All nursery stock to be treated should be placed in an air-tight tent or box. For every one hundred cubic feet of space in box or tent, take an ounce, avoirdupois weight, of fused potassium cyanide, ninety-eight per cent strength, preferably in lumps about the size of a walnut; one and one-half ounces commercial sulphuric acid, best grade, and two and one-fourth fluid ounces of water. First: Place the water in a three gallon vessel (which may be glazed earthenware); to this add the acid, and finally the potassium cyanide. The cyanide would be better enclosed in a small paper bag in which a hole is torn. Immediately close the doors or openings, taking all precaution against inhaling the gas, as it is one of the most deadly poisons known. After leaving box or tent closed for forty minutes, open all doors and allow at least one hour for thorough ventilation before attempting to remove stock. No injury is caused to the nursery stock if the gas is left in for more than forty minutes.

**Regulation V.** It shall be the duty of each and every person or corporation offering to sell, or selling and delivering within this state any nursery stock not previously inspected under the provisions of section 3619 to place on each and every package so sold and delivered a label or card containing the name and address of both the consignor and consignee, also from unlicensed nurseries an invoice of stock and from licensed nurseries a list of stock contained in each package.

**Regulation VI.** The inspectors appointed by the Commissioner are required to inspect in their respective districts all nursery stock grown in their districts, after the same has been dug from the nursery rows or ground or shipped into the district before the same shall be boxed or packed for the filling of orders, and no certificate shall be issued to any nursery in Montana until such inspection has been made and inspection fee paid. The fee for inspecting the nursery stock in Montana nurseries shall be Ten (\$10.00) dollars.

**Regulation VII.** For the purpose of preventing the spread of contagious diseases or insect pests among fruit and fruit trees the Commissioner directs that transportation companies or common carriers bringing fruit and nursery stock into this state from any other state shall, through their officials located at division points, notify the Chief, or the nearest regular inspector to the place of consignment of said shipment of fruit or nursery stock within their division, and said inspector shall at once inspect such shipment and attach thereto inspector's certificate, collecting the fee for the inspection thereof from the receiver of the shipment or add such fee to the bill of lading covering said shipment before it shall be turned over to any person or persons, corporation or corporations. The Chief shall furnish railroad officials at division points with lists of regular inspectors at least every six months.

**Regulation VIII.** The inspector shall inspect all fruits including melons, cantaloupes and tomatoes, but excepting cranberries, bananas and pineapples, and collect the fees prescribed by law from the owner or person in control of such fruit wherever found.

**Regulation IX.** For the purpose of preventing the spread of contagious diseases or insect pests among fruit and fruit trees, it is hereby declared and ordered that no fruit infested with San Jose Scale (*Aspidiotus perniciosus*), Putnam Scale (*Aspidiotus ancyclus*), Oyster Shell Scale (*Lepidosaphes ulmi*), Codling Moth (*Cydia pomonella*), or any other dangerous insect hereafter discovered; or infected with Apple Scab (*Venturia inaequalis*), Pear Scab (*Venturia pyrina*), Pear Blight (*Bacillus amylovorus*), Powdery Mildew (*Podosphaera oxyacanthae*), Bitter Rot (*Glomerella rufomaculans*), or any other dangerous disease hereafter discovered, shall be shipped from point of production except that upon written application to the Chief accompanied by an affidavit specifying that such fruit is to be used in the manufacture of some specific by-product, he may issue a written permit which must accompany inspection certificate attached to car. The purpose for which such fruit is to be used shall be plainly marked on the inspection certificate accompanying such shipment.

**Regulation X.** It shall be unlawful for any person to spray a tree, plant or shrub when the same is in bloom with any substance injurious to bees or honey.

**Regulation XI.** A quarantine may be established over any orchard or place where fruits, fruit products or nursery stock are grown or kept that is infested with any injurious insect pest or infected with any injurious disease, and the Commissioner, or his representative, is authorized and directed to enforce such quaran-

tine against any orchard or place where any such disease or insect pest is found. The Commissioner, or his representative, declaring such quarantine shall notify the owner or person in control of such orchard or place in writing of the establishment of such quarantine and thereafter such owner or person in control shall not ship or remove or allow to be shipped or removed any fruit, nursery stock or other material, except by the written permission of the Commissioner, or his representative. The owner or person in control of any such orchard or place may be permitted to use such fruit or material on the premises under the instructions of the Commissioner or his representative.

**Regulation XII.** All notices of condemnation of nursery stock or fruit given by an inspector shall be in writing and served either upon the owner, shipper or person in charge. If no person is in charge of such stock the inspector shall immediately telegraph the consignor at his address advising him of the action and in such case the consignor shall have three days to perfect an appeal as hereinafter described.

**Regulation XIII.** An appeal may be taken from the decision of an inspector to the Chief, which appeal must be in writing and set forth clearly and concisely the reasons therefor. Such appeal must be perfected within twenty-four hours after the notice has been served if notice is delivered in person and three days if notification is made by wire. Condemned stock must thereupon at the expense of the person perfecting the appeal, be immediately placed in quarantine until final action and determination of the appeal. The stock must at once be transferred by the inspector to the office of the Chief at the expense of the person appealing, and same shall be by said Chief examined and considered in passing judgment upon appeal. A final appeal may be made to the Com-



missioner from the decision of the Chief, such an appeal to be made in writing and within twenty-four hours after the decision of the Chief. The decision of the Commissioner shall be final and conclusive.

### **Chapter 138.**

An Act to Fix the Standard Grades of Apples, Defining Same; the Standard Size of Apple Box; Regulating the Sale of Apples; Providing for Marking of Containers; and Providing Penalties for Violation Thereof; and Repealing Chapter 276 of the Revised Codes of Montana, 1921, as Amended by Chapter 118 of the Session Laws of 1923 and Chapter 81 of the Session Laws of 1925.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF THE STATE OF MONTANA:

Section 1. The standard grades for apples for the State of Montana shall be: "Extra Fancy," "Fancy," "C," "Cooker," "Combination Grades" and "X F F C."

(A) "Extra Fancy" grade shall consist of mature, clean, smooth, well formed apples only, free from all insect pests, diseases, bruises and holes, spray burn, limb rub, visible water-core, skin punctures or skin broken at stem, and shall be free from russeting, except russeting within the cavity of the stem shall be permitted.

(B) "Fancy" grade shall consist of mature, clean, smooth, fairly well formed apples only, free from all insect pests, diseases, bruises and holes, spray burn, limb rub, visible water-core, skin punctures or skin broken at stem, but slight scratches and russeting shall be permitted up to five per centum (5%) of the surface of the apple. Apples carrying extra fancy color requirements characteristic of the variety, showing pin point scab in cavity, or basin, may be permitted in this grade.

(C) "C" grade shall consist of apples which are mature, free from infection, soft bruises and

broken skin and must have ten per centum (10%) of color requirements characteristic of the variety, provided that this grade may include healed over worm stings and scab spots not to exceed one-quarter ( $\frac{1}{4}$ ) inch in the aggregate. The word "Choice" must not be used in connection with this grade.

(D) "Cooker" grade shall consist of apples free from infection, or disease, or serious damage, but which do not meet the requirements of "Extra Fancy," "Fancy," or "C" grade, and shall be marked "Cookers" or "Culls."

(E) "Combination Grades." When "Extra Fancy" and "Fancy" apples are packed together the boxes must be marked "Combination Extra Fancy and Fancy." When "Fancy" and "C" grades are packed together the boxes must be marked "Combination Fancy and 'C'." Combination grades must contain at least twenty-five per centum (25%) of apples which belong to the higher grade in the combination.

(F) "X F F C" grade shall consist of "Extra Fancy," "Fancy," and "C" grade apples packed in combination. Boxes so marked must contain at least fifteen per centum (15%) of apples of "Extra Fancy" grade and not more than fifty per centum (50%) of "C" grade. No apples failing to meet the requirements of "C" grade shall be permitted in this grade.

(G) No apples smaller than two (2) inches in diameter shall be permitted in any grade. Small apples which are under size requirements as prescribed may be shipped marked "Small," provided such apples are free from injurious insect pests and diseases.

(H) In order to provide for variations incident to commercial grading and handling a tolerance of ten per centum (10%) for a total of all defects from the standard of the grade shall be allowed.



Section 2. Any box, barrel, crate or carton used in packing apples for sale shall be marked or branded in plain legible letters on one (1) end with:

a. The name of grower, or person, or firm responsible for pack, and the locality where grown or packed.

b. The name of variety.

c. With the grade contained therein, which must comply with the provisions of this Act.

d. With the approximate number of apples contained therein, or with the net weight of contents.

Section 3. Apples shipped or sold in bulk shall have two (2) cards at least four by six inches (4"x6") in size attached to the doors of the car or on side of truck in which they are moved, such cards to designate grade of apples as specified in Section 1. or "Orchard Run."

Section 4. **Standard Size of Apple Box:** There is hereby created and established a standard size of apple box for the State of Montana. The standard size of an apple box shall be of the following dimensions, when measured without distention of its parts: Depth of end, ten and one-half inches ( $10\frac{1}{2}$ "); width of end, eleven and one-half inches ( $11\frac{1}{2}$ "); length of box, eighteen inches (18") inside measurements; and representing as nearly as possible two thousand one hundred and seventy-three and one-half cubic inches ( $2,173\frac{1}{2}$ ").

Section 5. **Short Box to Be Marked:** Any box in which apples shall be packed and offered for sale that contains less than the required number of cubical inches as prescribed in the preceding section, shall be plainly marked on one (1) side and one (1) end with the words "SHORT BOX," or with the words or figures showing the practical relation which the actual capacity of the box bears to the capacity required by the pre-

ceding section. The marking required by this paragraph shall be in black letters of not less than one-half ( $\frac{1}{2}$ ) inch in size.

**Section 6. Penalty for Violation of Act:** No person, firm, company or organization shall sell or offer for sale, or shipment within or without the State of Montana, apples branded or packed in containers in violation of the provisions of this Act, provided that apples not conforming to established grades may be sold if labeled, tagged or branded in the same manner as graded products, except that in place of specifying the grade the words "Not Standard" shall be used. Any person, firm, company or organization who shall knowingly sell or offer for sale, or shipment within or without the State of Montana, apples branded or packed in containers in violation of the provisions of this Act, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be subject to a fine of not less than ten dollars (\$10.00), nor more than fifty dollars (\$50.00).

**Section 7.** Chapter 276 of the Revised Code of Montana, Chapter 118 of the Session Laws of 1923, and Chapter 81 of the Session Laws of 1925, and all Acts and parts of Acts in conflict herewith are hereby repealed.  
Approved March 9, 1931.

## **COLOR REQUIREMENTS FOR EXTRA FANCY AND FANCY GRADES**

### **Striped or Partial Red Varieties**

|                    | Extra Fancy<br>Per Cent | Fancy<br>Per Cent |
|--------------------|-------------------------|-------------------|
| McIntosh .....     | 66 $\frac{2}{3}$        | 33 $\frac{1}{3}$  |
| Wealthy .....      | 50                      | 25                |
| Delicious .....    | 66 $\frac{2}{3}$        | 25                |
| Jonathan .....     | 66 $\frac{2}{3}$        | 25                |
| Northern Spy ..... | 50                      | 15                |
| Wolf River .....   | 50                      | 15                |
| Rome Beauty .....  | 50                      | 15                |

|                   |    |    |
|-------------------|----|----|
| Wagener .....     | 50 | 15 |
| Gravenstein ..... | 25 | 10 |
| Ben Davis .....   | 50 | 15 |
| Alexander .....   | 50 | 15 |

### **Solid Red Varieties**

|            |    |    |
|------------|----|----|
| Gano ..... | 75 | 25 |
|------------|----|----|

### **Red Checked or Blush Varieties**

Extra Fancy—Perceptibly blushed cheek.

Fancy—No color requirements.

Maiden Blush.

Winter Banana.

McMahon White.

### **Green and Yellow Varieties**

All grades characteristic color.

Grimes Golden.

Northwestern Greening.

White Winter Pearmain.

Ortley.

Ten per centum (10%) of color characteristic of variety will be required in "C" grade.

Apples shall be admitted to Extra Fancy and Fancy grades subject to the above color requirements. The per centages stated refer to the area of the surface which must be colored with a good shade of red characteristic of the variety.

### **DEFINITIONS OF TERMS USED ON CERTIFICATES.**

The following definitions of terms are taken from the handbook of instructions to the inspectors. Some of these are more or less arbitrary but are the ones in use by the U. S. Bureau of Agricultural Economics which adopted them in order that they may have a uniform meaning all over the United States.

#### **Amounts.**

|                  |            |
|------------------|------------|
| Occasional ..... | 5% or less |
| Few or some..... | 5 to 10%   |
| Many .....       | 10 to 50%  |

**Layer.** A course or stratum of the load in a car, one package in height, shall be known as a layer.

**Stack.** A pile of packages extending from one side of the car to the other, one package in length, shall be known as a stack.

**Row.** A pile of packages extending lengthwise of the car, one package in width, shall be known as a row.

**Tight.** Meaning that the package is sufficiently filled to prevent any movement of the product within and to furnish the proper bulge with products and packages requiring a bulge.

**Very Tight.** Meaning the extreme of condition described under **Tight**, that is, too tight for best results and too much bulge for the good of the product.

**Fairly Tight.** Meaning the step between **Tight** and **Slack**, that is, tight enough to prevent the specimens from moving within the package sufficiently to cause injury under ordinary handling conditions, but not as nearly ideal as a **Tight** pack.

**Slack.** Meaning that the pack is not sufficiently full or tight to prevent movement of the product within the package, which may or may not result in injury.

**Very Slack.** May be used, meaning that the package is not full and a free movement of the product is permitted. The number of inches of slack should be stated.

## **TERMS FOR MATURITY OF DECIDUOUS FRUITS**

**Immature.** Meaning not fully matured. In some cases it would be desirable to use, in connection with this term, the words "green," "dry" or "shriveled." The term immature should be used

to indicate that the product was picked too green; it should not be used in connection with summer apples or green pears commonly marketed in a green condition, unless they are too green for usual purposes.

**Hard.** Meaning mature, ready for long distance shipment or long period storage for the variety but not fit for immediate consumption. Ground color usually green or slightly turning.

**Firm.** Meaning fully matured, ground color turning, sufficiently hard for shipment to reasonably distant markets or for short storage period for the variety, yet suitable for early consumption.

**Ripe.** Meaning ready for immediate consumption but not soft or mellow. Ground color fully developed. Usually not suitable for storage or shipment. The term "ripe" should never be used without a qualifying term or statement, as "firm ripe," "ripe but somewhat firm," "ripe but not dead ripe."

**Dead Ripe.** Meaning mellow or becoming soft, and must go into immediate consumption.

**Soft.** Meaning last step before decay sets in, and usually accompanied by more or less decay.

## DEFINITIONS OF TERMS AND PACKING REGULATIONS.

**Worm Stings.** The term "worm stings" as used in the foregoing grade rules shall be interpreted to mean "thoroughly healed stings" as the healing of the sting is the only evidence we have to show that the so-called sting is not infested.

**Pin Point Scab.** This term is intended to cover the very small scab infections which occur usually late in the season around and in the basis or cavity of the apple. These infections are about the size of impression made by the point of a pin.

**Packing.** All apples packed under these regulations shall be arranged in the container according to the approved and recognized methods and all packages shall be tightly filled, but the contents shall not show excessive or unnecessary bruising as a result of the pressure exerted in closing an over-filled package. Each packed box must show a minimum bulge of one-half inch on both top and bottom. Each apple wrapped shall be completely enclosed by its individual wrapper.

**"Uniform"** means that the factor being described (as size, maturity, etc.) does not vary widely in the packages, parts of a package or in different parts of the lot being described.

**"Irregular"** means that the factor being described (as size, maturity, etc.) varies widely in the packages, parts of packages or in different parts of the lot being described.

### **CONDITION.**

Scald, decay and freezing effects are defined as condition and not grade, and it shall not be unlawful to ship, sell, barter or otherwise dispose of or offer for sale any package of apples, or other fruits or vegetables grown or packed within the State of Montana, provided there is evidence that the apples, or other fruits or vegetables, were up to grade at the time of packing.

### **TOLERANCE.**

Tolerance is hereby defined as covering the defects mentioned in each grade and shall not be construed as covering decay, which shall not be permitted exceeding one-half of one per cent ( $\frac{1}{2}\%$ ).

### **PANSY SPOT.**

Pansy Spot shall be permitted in "Fancy" grade not exceeding one-half ( $\frac{1}{2}$ ) inch in the aggregate, and not exceeding one (1) inch in the aggregate in the "C" grade.

## STANDARD APPLE BOX.

The standard size of an apple box shall be  $10\frac{1}{2}$  inches deep:  $11\frac{1}{2}$  inches wide: 18 inches long, inside measurements; representing as nearly as possible  $2173\frac{1}{2}$  cubic inches.

Apple box shoos for above box should comply with the following dimensions:

End:  $\frac{3}{4}$ " or  $\frac{7}{8}$ " x  $10\frac{1}{2}$ " x  $11\frac{1}{2}$ ".

Sides:  $\frac{3}{8}$ " x  $10\frac{1}{2}$ " x  $19\frac{1}{2}$ " or  $19\frac{3}{4}$ ".

Top and Bottom:  $\frac{1}{4}$ " x  $5\frac{1}{2}$ " x  $19\frac{1}{2}$ " or  $19\frac{3}{4}$ ".

Cleats:  $\frac{3}{8}$ " x  $\frac{3}{4}$ " x  $11\frac{1}{2}$ ".

32 6d nails commonly used per box.

## MARKING APPLE BOXES.

Under the Federal Food and Drug Act it is unlawful to ship fruit from one state to another unless the packages are plainly marked on the outside with a statement as to the net contents. Boxes of apples marked "not less than forty pounds net when packed" would come within the law, and all boxes of apples should be so marked in connection with the State requirements, which include the correct name of the variety or "variety unknown," the name of the grower, and his address, the grade, and number of apples contained in the package.

In marking the grade "Fancy" on the box it should be placed close enough to the left hand side of the box so that an unscrupulous dealer can not put the word "Extra" in front of it.

The grower's name and address should be placed on the opposite end of the box from that on which the grade and label are placed. The label end should be marked thus:

"Fancy McIntosh 125. Not less than 40 pounds net when packed."



## SUMMARY BOX MARKING.

Name of variety or "Variety Unknown."

Name of grower and address.

Grade, and number of apples contained in packages and net weight.

## APPLE PACK.

| Style of Pack—Diagonal                | No. in box |
|---------------------------------------|------------|
| 2x1 wide, 4-4 long, 3 layer deep..... | 36         |
| 2x1 wide, 5-4 long, 3 layer deep..... | 41         |
| 2x1 wide, 5-5 long, 3 layer deep..... | 45         |
| 2x1 wide, 6-5 long, 3 layer deep..... | 50         |
| 2x1 wide, 6-6 long, 3 layer deep..... | 54         |
| 2x2 wide, 3-3 long, 4 layer deep..... | 48         |
| 2x2 wide, 3-4 long, 4 layer deep..... | 56         |
| 2x2 wide, 4-4 long, 4 layer deep..... | 64         |
| 2x2 wide, 4-5 long, 4 layer deep..... | 72         |
| 2x2 wide, 5-5 long, 4 layer deep..... | 80         |
| 2x2 wide, 5-6 long, 4 layer deep..... | 88         |
| 2x2 wide, 6-6 long, 4 layer deep..... | 96         |
| 2x2 wide, 6-7 long, 4 layer deep..... | 104        |
| 2x2 wide, 7-7 long, 4 layer deep..... | 112        |
| 2x3 wide, 7-8 long, 4 layer deep..... | 120        |
| 2x2 wide, 8-8 long, 4 layer deep..... | 128        |
| 3x2 wide, 4-3 long, 5 layer deep..... | 88         |
| 3x2 wide, 4-4 long, 5 layer deep..... | 100        |
| 3x2 wide, 5-4 long, 5 layer deep..... | 113        |
| 3x2 wide, 5-5 long, 5 layer deep..... | 125        |
| 3x2 wide, 6-5 long, 5 layer deep..... | 138        |
| 3x2 wide, 6-6 long, 5 layer deep..... | 150        |
| 3x2 wide, 7-6 long, 5 layer deep..... | 163        |
| 3x2 wide, 7-7 long, 5 layer deep..... | 175        |
| 3x2 wide, 8-7 long, 5 layer deep..... | 188        |
| 3x2 wide, 8-8 long, 5 layer deep..... | 200        |
| 3x2 wide, 9-8 long, 5 layer deep..... | 213        |



| Style of Pack—Diagonal                     | No. in Box |
|--|------------|
| 3x2 wide, 9-9 long, 5 layer deep.....      | 225        |
| 3x3 wide, 5-5 long, 6 layer deep.....      | 180        |
| 3x3 wide, 5-6 long, 6 layer deep.....      | 198        |
| 3x3 wide, 6-6 long, 6 layer deep.....      | 216        |
| 3x3 wide, 7-6 long, 6 layer deep.....      | 234        |
| 3x3 wide, 7-7 long, 6 layer deep.....      | 252        |
| 5 straight pack, 8 long, 5 layer deep..... | 200        |
| 5 straight pack, 9 long, 5 layer deep..... | 225        |

### **RULES FOR ESTIMATING PAPER AND CARDBOARD FOR APPLE PACKING.**

|                                      |    |      |
|--------------------------------------|----|------|
| Wraps for packing 100 boxes.....     | 50 | lbs. |
| Lining for packing 100 boxes.....    | 7½ | lbs. |
| Cardboard for packing 100 boxes..... | 16 | lbs. |

### **RULES FOR USE OF PAPER.**

- Use 8x8 for 188-200-213-225 packs.
- Uses 9x9 for 175-163-150-138-125-113 packs.
- Use 10x10 for 112-104-100-96-88 packs.
- Use 11x11 for 80-72-64-56 packs.
- Use 12x12 for 50-48-41-36-32 packs.

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## **MONTANA OFFICIAL GRADES FOR THE SALE AND SHIPMENT OF CHERRIES.**

### **No. 1 Cherries.**

No. 1 cherries are defined as cherries well colored for the variety, free from worms, blemishes, splits, bruises and all other injuries.

### **No. 2 Cherries.**

This grade may contain all other merchantable stock.

A tolerance of five per cent of noticeable defects will be allowed.

Inspectors are directed to mark on the certificate the condition of the stock, the variety, size

and net weight of package, and whether Hard, Firm, Ripe, Soft, or Flabby, and such other information as the buyer may require in order to intelligently bid on the product.

Cherries may be shipped in the standard ten-pound cherry crate, or in lug boxes. If the ten-pound standard crate is used it is recommended that they be Faced and Filled and tightly packed. Great care must be exercised to remove leaves, limbs, and other refuse in all cases.

Standard Cherry Boxes:

10-pound cherry box—18x9x2¼ inches.

15-pound cherry box—18½x11½x3 inches.

20-pound cherry box—18x9x4½ inches.

UNITED STATES DEPARTMENT OF AGRICULTURE—BUREAU OF CHEMISTRY.

FOOD AND DRUGS ACT.

We wish to call attention to this act in addition to the Montana requirements. In all interstate shipments violations of this act constitute a serious offense as this is a federal requirement.

“Regulation 29. Statement of Weight, Measure or Count. (Section 8, paragraph 3, under ‘Food,’ as amended by Act of March 3, 1913.)

“(a) Except as otherwise provided by this regulation, the quantity of the contents, in all cases of food, if in package form, must be plainly and conspicuously marked in terms of weight, measure, or numerical count, on the outside of the covering or container usually delivered to consumers.

“(b) The quantity of the contents so marked shall be the amount of food in the package.

“(c) The statement of the quantity of the contents shall be plain and conspicuous, shall not be a part of or obscured by any legend or design and shall be so placed and in such characters as to be readily seen and clearly legible when the size of the package and the circumstances under which it is ordinarily examined by purchasers or consumers are taken into consideration.”

## SPRAY PROGRAM

| WHAT FOR               | WITH  | WHEN   |
|------------------------|---|--|
| SCALE<br>OYSTER SHELL  | Miscible oil<br>1 part to 6 parts of water.<br>Lime-sulphur solution.<br>1 gal. to 25 gals. water.<br>Summer Spray<br>Add 1 lb. spreader to each 100 gals. spray.   | The trees are dormant. For light infection use Lime-Sulphur Solution as the eggs are hatching, about June 1st to 10th.                   |
| LEAF ROLLER            | DORMOIL<br>8 gals. to 100 gals. water. Add 1 lb. Spreader to each 100 gals. of spray.   | Apply just before buds open.   |
| BLISTER MITE           | LIME-SULPHUR SOLUTION<br>1 part to 10 parts water. Add 1 lb. Spreader to each 100 gals. spray.  | In the spring as buds are opening.   |
| SCAB } APPLE<br>} PEAR | LIME-SULPHUR SOLUTION<br>1st. 1 part to 25 parts water.<br>2nd. 1 part to 30 parts water.<br>Later. 1 part to 30-35 parts water. Can be combined with lead arsenate.<br>Add 1 lb. Spreader to each 100 gals. spray. | 1st, when bud clusters begin to show pink.<br>2nd, when petals begin to fall.<br>Later, at intervals of 15 days, depending upon weather. |
| MILDEW OF CHERRY       | LIME-SULPHUR SOLUTION<br>1 part to 25 parts water. Add 1 lb. Spreader to each 100 gals. spray.  | 1st. In the pink.<br>2nd. In the Calyx.  |

| WHAT FOR  | WITH   | WHEN  |
|---|--|---|
| BROWN ROT }<br>CHERRIES }<br>PRUNES }                     | BORDEAUX MIXTURE<br>4-4-50. Add 1 lb. Spreader to<br>each 100 gals. spray.   | 1st. Just before the bloom opens.<br>2nd. Just before picking time.   |
| CODDLING MOTH   | LEAD ARSENATE<br>4 lbs. to 100 gals. water. Add<br>1 lb. Spreader to each 100 gals.<br>spray.  | 1st. When petals are falling.<br>2nd. Three weeks later.<br>Band your trees in the spring and<br>examine every 3 weeks.                   |
| BUD MOTH AND<br>GREEN FRUIT WORM                          | LEAD ARSENATE<br>4 lbs. to 100 gals. water. Add<br>1 lb. Spreader to each 100 gals.<br>spray.  | 1st. In the pink.<br>2nd. When petals are falling.<br>A spray about August 15th is<br>sometimes very effective.                           |
| PEAR AND CHERRY<br>SLUG AND OTHER LEAF-<br>EATING INSECTS | LEAD ARSENATE<br>4 lbs. to 100 gals. water. Add<br>1 lb. Spreader to each 100 gals.<br>spray.  | As soon as the petals have fallen<br>from the bloom.<br>Whenever they appear on leaves.   |
| GREEN<br>APHIS }<br>PURPLE }<br>CHERRY }<br>PEACH }       | BLACK LEAF NO. 40<br>1 pint to each 100 gal. water.<br>Add 1 lb. Spreader to each 100<br>gals. spray.  | As soon as discovered.<br>Best when buds are swelling.  |
| WOOLLY APHIS<br>AIREAL<br>ROOT FORM                       | BLACK LEAF NO. 40<br>1 pint to each 100 gal. water.<br>1 lb. spreader to each 100 gals.<br>spray.<br>3 gal. miscible oil, 1 lb.<br>sprayer to each 100 gals.<br>spray. | When discovered. For roots ex-<br>pose and apply.<br>Apply in the fall immediately<br>after picking the fruit; has<br>given good results. |

| WHAT FOR                                | WITH   | WHEN   |
|---|--|--|
| CHERRY & CURRANT<br>FRUIT FLY OR MAGGOT | ARSENATE OF LEAD<br>4 lbs. to 100 gals. water.<br>DO NOT USE SPREADER<br>No need of sweetened bait.                                  | As soon as the flies appear and<br>before they lay their eggs in the<br>fruit, usually about June 15th.<br>Repeat every ten days as long<br>as flies appear. |
| SHOT HOLE FUNGUS<br>OF THE CHERRY       | LIME-SULPHUR SOLUTION<br>1 gal. to 25-30 of water. Add<br>1 lb. Sprayer to each 100<br>gals. spray.                                  | 1st. As buds begin to show pink.<br>2nd. As petals are falling.  |
| CHERRY TREE<br>YELLOW LEAF              | LIME-SULPHUR SOLUTION<br>1 gal. to 25 gals. water. Add<br>1 lb. Sprayer to each 100 gals.<br>spray.                                  | 1st. When the buds are first show-<br>ing pink.<br>2nd. When petals have fallen.<br>3rd. Two weeks later.  |
| STRAWBERRY WEEVIL                       | "GO-WEST" Poison Bait  | 1st. As soon as weevil appears.<br>2nd. Three weeks later if neces-<br>sary.   |
| FIRE BLIGHT                             | NO SPRAY EFFECTIVE<br>Always disinfect pruning wounds<br>and tools by using 1 gram cyan-<br>ide of mercury to 500 grams of<br>water. | Remove hold-over cankers and dis-<br>eased wood. Cut 12 inches below<br>infection. Burn immediately.   |
| POTATO BUGS                             | LEAD ARSENATE<br>3 lbs. to 50 gals. water. Add<br>$\frac{1}{2}$ lb. Sprayer to each 50 gals.<br>spray.                               | As soon as first soft bugs appear.   |



## IMPORTANT SPRAYING NOTES.

To be effective spraying must be intelligently done. The grower should know the life history and feeding habits of the insects he is attempting to control. Insects are divided generally into two groups, one with biting mouth parts the other with sucking mouth parts. To control insects of the first type a stomach poison, such as an arsenical, is generally used; for the second type a contact insecticide, such as tobacco extract or lime sulphur, is the effective remedy.

There are three main factors in successful insect pest and disease control. First the right MATERIAL, second the right TIME of application, and third THOROUGHNESS of application. One must not expect the insect to cheerfully commit suicide. A stomach poison must be distributed evenly over ALL the foliage and contact as applied to contact insecticides means that the insect or the egg masses must be actually COVERED.

It is to be assumed in using the foregoing table that the grower knows what he is spraying for. As lime sulphur, arsenate of lead and tobacco extracts can be used in combination a single combined spray will control several different insects or diseases.

### MATERIALS.

**Miscible Oil.** Should not be used in combination with any other spray. Miscible oils are not uniform products and not all effective. For this reason we would advise growers to communicate with the Chief, Division of Horticulture, Missoula, for recommendations as to brands.

By ARSENATE OF LEAD we refer to the powdered form. In case the paste is used the amount should be doubled as the paste is 50 per cent water.

In using TOBACCO EXTRACT alone add soap,

but do not add soap if used in combination with either arsenate of lead or lime sulphur.

**Spreaders.** These are products recently put on the market to insure a more even spread of the spray material and to cause the spray to adhere more closely to the leaves. It is also used in combination with lime sulphur and arsenate of lead to prevent the chemical union between the two which is the cause of the so-called black sludge which sometimes results from this combination. So far the use of spreaders has been very satisfactory.

**LIME SULPHUR No. 1** is 28° Beaume solution at dilution of 1 to 9.

**LIME SULPHUR No. 2** is 28° Beaume solution at dilution of 1 to 25.

For other strengths use the following Dilution Table taken from Circular No. 36, Montana Agricultural Experiment Station by H. E. Morris and J. R. Parker. A hydrometer for testing lime sulphur solution can be purchased at any drug store.

# DILUTION TABLE.

| Hydrometer Readings |                  | Gallons of water to one gallon of concentrated lime sulphur |              |              |
|---------------------|------------------|---|--------------|--------------|
| Degrees Baume       | Specific Gravity | Just before leaf buds open                                  |              | Summer Spray |
|                     |                  | Oyster Shell Scale  | Blister Mite | Scab         |
| 36 .....            | 1.330            | 9   | 12½          | 36¼          |
| 35 .....            | 1.318            | 8¾  | 12           | 35           |
| 34 .....            | 1.306            | 8¼  | 11½          | 33½          |
| 33 .....            | 1.295            | 8   | 11           | 32¼          |
| 32 .....            | 1.283            | 7½  | 10½          | 30½          |
| 31 .....            | 1.272            | 7¼  | 10           | 29¼          |
| 30 .....            | 1.261            | 6¾  | 9½           | 27¾          |
| 29 .....            | 1.250            | 6½  | 9            | 26½          |
| 28 .....            | 1.240            | 6   | 8½           | 25           |
| 27 .....            | 1.229            | 5¾  | 8            | 23¾          |
| 26 .....            | 1.219            | 5¼  | 7½           | 22¼          |
| 25 .....            | 1.208            | 5   | 7            | 21           |
| 24 .....            | 1.198            | 4½  | 6½           | 19½          |
| 23 .....            | 1.188            | 4¼  | 6            | 18¼          |
| 22 .....            | 1.179            | 3¾  | 5½           | 17¼          |
| 21 .....            | 1.169            | 3½  | 5            | 15¾          |
| 20 .....            | 1.160            | 3¼  | 4¾           | 14¾          |
| 19 .....            | 1.151            | 3   | 4½           | 13¾          |

UNITED STATES DEPARTMENT OF  
AGRICULTURE  
SERVICE AND REGULATORY ANNOUNCE-  
MENTS.  
(Agricultural Economics)

Amendment No. 5 to Service and Regulatory An-  
nouncements No. 93 (Agricultural Economics).

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OFFICIAL STANDARDS FOR THE INSPEC-  
TION OF POTATOES.

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United States Department of Agriculture,  
Office of the Secretary,  
June 30, 1927.

By virtue of the authority vested in the Secretary of Agriculture by the following provisions of an act of Congress entitled "An Act making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1927," approved May 11, 1926 (Public 214, 69th Congress), or any future act of Congress conferring like authority.

For enabling the Secretary of Agriculture to investigate and certify to shippers and other interested parties the class, quality, and/or condition of cotton and fruits, vegetables, poultry, butter, hay, and other perishable farm products when offered for interstate shipment or when received at such important central markets as the Secretary of Agriculture may from time to time designate, or at points which may be conveniently reached therefrom under such rules and regulations as he may prescribe, including payment of such fees as will be reasonable and as nearly as may be to cover the cost for the service rendered: Provided, That certificates issued by the authorized agents of the department shall be received in all courts of the United States as prima facie evidence of the truth of the statements therein contained.

I, W. M. Jardine, Secretary of Agriculture, do hereby amend the rules and regulations promulgated on June 30, 1925, to provide that the following shall be the official standards of the United States for the inspection and certification of potatoes:

### Grades

U. S. No. 1 shall consist of potatoes of similar varietal characteristics which are not badly misshapen, which are free from freezing injury and soft rot, and from damage caused by dirt or other foreign matter, sunburn, second growth, growth cracks, hollow heart, cuts, scab, blight, dry rot, disease, insects, or mechanical or other means.

The diameter of potatoes of round varieties shall be not less than  $1\frac{7}{8}$  inches and of potatoes of long varieties  $1\frac{3}{4}$  inches, but lots of potatoes which are not less than  $1\frac{1}{2}$  inches in diameter and which meet the remaining requirements of this grade may be designated "U. S. No. 1,  $1\frac{1}{2}$  inches minimum."

In order to allow for variations incident to proper grading and handling, not more than 5 per cent, by weight, of any lot may be below the prescribed size. In addition, not more than 5 per cent, by weight, may be damaged by hollow heart, and not more than 6 per cent may be below the remaining requirements of this grade; but not to exceed one-sixth of this amount, or 1 per cent, shall be allowed for potatoes affected by soft rot.<sup>1</sup>

U. S. No. 2 shall consist of potatoes of similar varietal characteristics which are free from freezing injury and soft rot and from serious damage caused by sunburn, second growth, growth cracks, hollow heart, cuts, scab, blight, dry rot, disease, insects, or mechanical or other means.

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<sup>1</sup>Soft rot or other deterioration developing in transit on potatoes otherwise up to grade shall be considered as affecting the condition and not the grade.

The diameter of potatoes of this grade shall be not less than 1½ inches.

In order to allow for variations incident to proper grading and handling, not more than 5 per cent, by weight, of any lot may be below the prescribed size, and, in addition, not more than 6 per cent, by weight, may be below the remaining requirements of this grade; but not to exceed one-sixth of this tolerance, or 1 per cent, shall be allowed for potatoes affected by soft rot.

U. S. Fancy shall consist of potatoes of one variety which are mature, bright, well shaped, free from freezing injury, soft rot, dirt or other foreign matter, sunburn, second growth, growth cracks, hollow heart, cuts, scab, blight, dry rot, disease, insect or mechanical injury, and other defects.

The size shall be stated in terms of minimum diameter or minimum weight or of range in diameter or weight following the grade name, but in no case shall the diameter be less than 2 inches.

In order to allow for variations incident to proper grading and handling, not more than 5 per cent, by weight, of any lot may vary from the size stated, and, in addition, not more than 6 per cent, by weight, of any lot may be below the remaining requirements of this grade; but not to exceed one-sixth of this tolerance, or 1 per cent, shall be allowed for potatoes affected by soft rot.<sup>2</sup>

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<sup>2</sup>Soft rot or other deterioration developing in transit on potatoes otherwise up to grade shall be considered as affecting the condition and not the grade.

### Definitions of Terms.

As used in these grades:

“Mature” means that the outer skin (epidermis) does not loosen or “feather” readily during the ordinary methods of handling.

“Bright” means free from dirt or other foreign



matter, damage or discoloration from any cause, so that the outer skin (epidermis) has the attractive color normal for the variety.

"Well shaped" means the normal, typical shape for the variety in the district where grown, and free from pointed, dumb-bell shaped, excessively elongated, and other ill-formed potatoes.

"Soft rot" means any soft or mushy condition of the tissue, such as slimy soft rot, wet fusarium or wet breakdown following freezing injury or sun scald.

"Diameter" means the greatest dimension at right angles to the longitudinal axis. The long axis shall be used without regard to the position of the stem (rhizome).

"Free \* \* \* from damage" means that the appearance shall not be injured to an extent readily apparent upon casual examination of the lot, and that any damage from the causes mentioned can be removed in the ordinary process of preparation for use without appreciable waste. Loss of outer skin (epidermis) shall not be considered as an injury to the appearance.

"Badly misshapen" means of such shape as to cause appreciable waste in the ordinary process of preparation for use.

"Free from serious damage" means that the appearance shall not be seriously injured to an extent readily apparent upon casual examination of the lot and that any damage from the causes mentioned can be removed in the ordinary process of preparation for use without a waste of 10 per cent or more of the total weight.

In testimony whereof I have hereunto set my hand and caused the official seal of the Department of Agriculture to be affixed, in the city of Washington, this 30th day of June, 1927.

W. M. JARDINE,  
Secretary of Agriculture.

(Seal Dept. of Agric.)

## CERTIFIED SEED POTATO GRADE, 1929

Tubers shall be practically free from dirt, foreign matter, sunburn, second growth, growth cracks, hollow heart, cuts, bruises, insects and mechanical injuries, dry rot, or other defects. (Interpretation of these defects in accordance with that of U. S. No. 1 grade.) A tolerance of 3 per cent by weight will be allowed for each of these defects, provided the total of all of the above enumerated defects shall not exceed 4 per cent.

Tubers to be of seed size must come within the limits of  $1\frac{1}{2}$  to 12 ounces. A tolerance of 5 per cent will be allowed on size.

Tubers offtype for the variety shall be counted as defective tubers. If present in such numbers as to affect materially the appearance of the stock, this shall constitute reason for grade rejection.

**Variety Mixture**—One-half of 1 per cent.

**Disease Limits—Scab.** Not to exceed 10 per cent by weight of tubers affected with common scab, these tubers to show only slight infection.

**Rhizoctonia**—Same as for scab.

**Stem End Discoloration**—Not to exceed 5 per cent by weight.

**Spindle Tuber**—Not to exceed 1 per cent by weight.

**Wet Rots**—Same as U. S. No. 1 grade.

**Powdery Scab**—None.

Seed stock improperly stored, as indicated by black heart, excessive sweating, sprouting, or shriveling, shall not be tagged as certified stock.

Certified potatoes shall be shipped in new sacks of uniform size and even weight.

Regular sewing twine shall be used in sewing

sacks. The use of binder twine, etc., shall constitute reason for refusal to tag the sacks.

Certification has not been completed until the potatoes have met grade requirements as well as the field requirements. To be sold as certified seed stock the potatoes must be tagged with the official tag of the Montana Potato Improvement Association, which shall be attached so as to constitute a seal.

## **RULES AND REGULATIONS GOVERNING SHIPPING POINT INSPECTION.**

The following rules and regulations covering shipping point inspection are endorsed by the United States Department of Agricultural Economics and various states in order to secure uniformity of the work.

**Certificates.** Original inspection certificates will be issued only to applicants or their agents authorized to receive such certificates. All fruit and vegetable certificates are issued by the State of Montana in a single series. Inspectors are requested to issue the certificates to the applicant the same day the inspection is completed.

## **REINSPECTION AND ISSUANCE OF REIN- SPECTION CERTIFICATES AT SHIPPING POINT.**

A reinspection, in case such should occur, shall be known as one made after the first certificate on the lot has been issued and where the first certificate has been found to be an incorrect report of the conditions pertaining to the product at the time the first inspection was made. In such cases another certificate will be issued to the applicant without charge. However, if the difference in the two reports is the result of changed conditions, pertaining to the product since first inspection was made, or when the product fails to meet the grade intended at the time the first inspection

is made then the second inspection shall not be deemed a reinspection and a second fee shall be due from the applicant, that is where either a loaded car has remained on the track over night, and the contents had been subjected to freezing or a lot has been prepared contrary to the grade desired.

## REINSPECTION IN RECEIVING MARKETS.

When a car of produce which has been inspected at shipping point and certified as to grade, is rejected in a terminal market, the following points should be borne in mind:

1. The joint state and federal certificate is prima facie evidence in all courts of the United States of the truth therein contained.

2. The burden of proof that the stock is not of the grade certified to at point of origin rests with the receiver.

3. The rules and regulations governing the Food Products Inspection Law provide that whenever any financially interested party is dissatisfied with the findings of the original inspection he may, by complying with certain provisions, request a reinspection.

4. When such reinspection reverses the original inspection certificate no charge is made the applicant for the service. If, however, the reinspection confirms the original inspection, a fee of \$12.00 is charged.

5. An inspection for condition only may be made at receiving point, since decay, freezing injury or other change may take place between point of origin and the receiving market. Such an inspection is not a reinspection and in no way affects the standing of the original certificate. Inspections for condition are desirable for the purpose of checking the responsibility for any damage occurring in transit showing the state of

maturity, or any factors affecting conditions rather than grade.

6. Where any cars are reported arriving in "bad condition," "badly decayed," etc., and doubt exists as to receivers' contentions, the shipper should wire the "Food Products Inspection Service" in the market in question, requesting inspection for "Condition" only. For this service the regular \$4.00 fee will be charged. Always state in your wire whether car was inspected or not at shipping point, giving the certificate number, if known.

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### INSPECTOR'S LICENSE.

No person, firm, corporation or association is permitted to issue, classify and sign certificates covering the grade of farm products when such products have been officially standardized, except as provided by law and only by a person properly qualified, licensed and designated as a State Inspector by the State Department of Agriculture.

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### INSPECTION FEES.

|   |        |
|---|--------|
| Fruit inspection, per car.....            | \$5.00 |
| Fruit inspection, per box or package..... | .02    |
| Potato inspection, per car.....           | 4.00   |
| Bean inspection .....                     | 4.00   |

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## MONTANA DEPARTMENT OF AGRICULTURE

### GRADES FOR MONTANA-GROWN, GREAT NORTHERN BEANS.

(Great Northern White)

Choice, Hand-Picked, Montana-Grown, Great Northern Beans: Must be bright, sound, dry, well screened, to contain not less than ninety-eight and one-half per cent (98½%) sound, merchantable beans and must not contain more than one

and one-half per cent ( $1\frac{1}{2}\%$ ) of discolored and split beans.

**Number One, Hand Picked, Montana-Grown, Great Northern Beans:** Must be average color of crop year, sound, dry, well screened and must not contain more than three per cent (3%) of discolored and split beans.

**Choice, Re-Cleaned, Montana-Grown, Great Northern Beans:** Must contain not less than ninety-eight per cent (98%) sound, merchantable beans and not over two per cent (2%) in the aggregate of damaged, discolored, other beans, splits or foreign matter and in no case more than one per cent (1%) of adobe or foreign matter.

**Number One, Re-Cleaned, Montana-Grown, Great Northern Beans:** Must contain not less than ninety-six per cent (96%) sound, merchantable beans and not over four per cent (4%) in the aggregate of damaged, discolored, other beans, splits or foreign matter and in no case more than one and one-half per cent ( $1\frac{1}{2}\%$ ) of foreign matter; one and one-half per cent ( $1\frac{1}{2}\%$ ) damaged, and two per cent (2%) split beans.

#### Definitions.

1. A dry bean is defined as one containing not to exceed 17% moisture at 175 degrees Centigrade.

2. Where the skin of the bean is not removed but slightly cracked, such beans shall not be considered as split beans.

3. All certificates should bear the year of the crop of the beans inspected.

4. All percentages to be determined by weight. September 17, 1925.

A. H. Bowman,  
Commissioner of Agriculture.



State of Montana.

A PROCLAMATION BY THE GOVERNOR.

Quarantine No. 1A.

ALFALFA WEEVIL.

WHEREAS. It has become known to me that an injurious insect, popularly called the alfalfa weevil and scientifically known as *Phytonomus posticus*, exists and is dangerously injurious to alfalfa in the State of Utah; in certain counties in the State of Wyoming, to-wit: Platt, Converse, Natrona, Fremont, Sweet Water, Uinta, Lincoln, Goshen and Carbon counties; in certain counties in the State of Colorado, to-wit: Delta, Moffat, Ouray, Routt, Gunnison, Montrose and Rio Blanco counties; in the State of Nevada, to-wit: Washoe, Storey, Ormesby, Churchill, Pershing, Lyon and White Pine counties; in certain counties in the State of Oregon, to-wit: Malheur and Baker counties; in all of the counties in the State of Idaho, save and except Lemhi, Latah, Benewah, Shoshone, Kootenai, Bonner, Boundary, Clearwater, Nez Perce and Lewis counties; and also in the counties of Sierra, Plumas and Lassen in the State of California.

NOW, THEREFORE, I, J. E. Erickson, Governor of the State of Montana, under and by virtue of the authority conferred upon me by Section 3631 of the Revised Codes of Montana of 1921, do hereby declare and proclaim a quarantine against said State of Utah; against the counties of Platt, Converse, Natrona, Fremont, Sweet Water, Uinta, Lincoln, Goshen, and Carbon in the State of Wyoming; against the counties of Delta, Moffat, Ouray, Routt, Gunnison, Montrose and Rio Blanco in the State of Colorado; against the counties of Washoe, Storey, Ormesby, Churchill, Pershing, Lyon and White Pine in the State of Nevada; against the counties of Baker and Malheur in the State of Oregon; against the counties

of Sierra, Plumas, and Lassen in California; and against all of the counties of the State of Idaho, save and except the counties of Lemhi, Latah, Benewah, Shoshone, Kootenai, Bonner, Boundary, Clearwater, Nez Perce and Lewis counties; and forbid the importation into Montana of the following agricultural products and other articles, excepting under conditions and regulations as herein specified:

1. Alfalfa hay and other hays of all kinds and cereal straws, excepting material known locally in Utah as salt grass packing hay, which shall be admitted into Montana, provided that said salt grass packing hay be cut only between the dates October 1 and April 1, and that the raking, shocking, stacking, baling and shipping of this material as a commercial product be conducted only after the maximum daily temperature of the season has fallen below sixty degrees Fahrenheit. Provided, further, that a certificate be required from the Crop Pest Inspector of the State of Utah, showing that these requirements have been met, which certificate shall accompany each shipment. Provided, further, that no salt grass packing hay shall be held over in the field from one season to another. The use of salt grass as a packing material in shipments of fruit, crockery, and other materials is permitted, provided said salt grass hay has been cut and removed from the field between October 1 and April 1, as above specified, and stored in warehouses removed from alfalfa fields, alfalfa hay or other suspected materials. Excepting further, that alfalfa meal or other finely ground meals made from alfalfa hay may be shipped from the above designated quarantined states and counties into the State of Montana, under the following regulations:

Mills desiring to ship such products into Montana shall apply to the Chief of the Di-

vision of Horticulture of the Department of Agriculture of Montana for a permit. Such permit shall be issued only to owners or operators of mills located on land free of and remote from growing alfalfa. The Chief of the Division of Horticulture of Montana, before issuing such a permit, shall satisfy himself that such alfalfa milled products, if not shipped at once after grinding, have been stored in warehouses remote from growing alfalfa and free from alfalfa hay and the hauling of the hay to the mills and the grinding of the meal has been done only between the dates of October 1 and April 1. Violation of any of the provisions of these regulations governing the shipment of alfalfa meal products into Montana shall be cause for the revocation of such permits.

2. Fresh fruits and vegetables, exclusive of potatoes, excepting under the following regulations:
  - a. Shipments for Montana to be made only from points designated by the recognized State Pest Inspection officers of the state shipping into Montana, said officers to notify the Chief of the Division of Horticulture of the Department of Agriculture of the State of Montana, by registered mail or by telegraph, of the designation of all such shipping points in the aforesaid state of Utah; and counties in the state of Wyoming, to-wit: Platt, Converse, Natrona, Fremont, Sweet Water, Uinta, Lincoln, Goshen and Carbon counties; and counties of Delta, Moffat, Ouray, Routt, Gunnison, Montrose and Rio Blanco in Colorado; and counties in the state of Nevada, to-wit: Washoe, Storey, Ormesby, Churchill, Pershing, Lyon and White Pine counties; and counties of Baker and Malheur in Oregon; and in the state of California the counties

of Sierra, Plumas and Lassen; and in all counties in the aforesaid state of Idaho save and except the counties of Lemhi, Latah, Benawah, Shoshone, Kootenai, Bonner, Boundary, Clearwater, Nez Perce and Lewis; said notification to be sent and its receipt to be acknowledged before any shipments are made to the State of Montana from said designated points.

- b. Shipments to be repacked from orchard or field boxes into new, clean boxes or other fresh containers.
  - c. All wagons or other conveyances used in hauling to the place where repacking is conducted to be kept free from alfalfa hay or other hays, straw, and all other means of contamination.
  - d. All packing houses to be at all times free of alfalfa hay, other hays, straw, and other means of contamination.
  - e. Each lot shipment shall bear an official certificate of the state from which the shipment originates, stating that it has been inspected, and passed in compliance with these regulations and stating where it was packed and inspected.
- 3. Potatoes, unless accompanied by an official certificate signed by the recognized State Pest Inspection officer of the state from which such shipments of potatoes originate, setting forth that the potatoes have passed over a screen, placed in new, clean sacks and packed in cars that are free of alfalfa hay or other means of contamination.
  - 4. All nursery stock, unless accompanied by special certificate setting forth that such nursery stock has been fumigated for the alfalfa weevil in an airtight enclosure, subsequent to being boxed, baled or packed for shipment,

with cyanide of potassium or cyanide of sodium at the rate of one ounce to each one hundred cubic feet of enclosed space.

5. That no shipment of household or emigrant's movable goods originating in any state or county designated as infested with the alfalfa weevil shall be brought into the State of Montana by any common carrier, person or persons, unless such shipment be accompanied by a copy of a sworn statement made in duplicate by the owner or shipper after the following forms or blanks, which will be furnished to applicants by the Chief of the Division of Horticulture of the Department of Agriculture of Montana, Missoula, Montana, and copy No. 2 to be delivered to the common carrier agent, with a special certificate appended, to attach to waybill.

State of..... }  
County of..... } ss.

I hereby solemnly swear that I was present during the preparation for shipment of the household or emigrant's goods which this affidavit accompanies; that the goods were delivered to the.....

(railroad)

at .....  
(station)

on..... constitut-  
(month, day, year)

ing (less than a carload).....

(if carload write initials and car No. here)  
to be shipped to.....

(name of consignee)

at .....  
(destination)

via .....  
(give initials of other lines)

that no nursery stock, vegetables or fruit is included in the shipment and that no hay or

straw (except as provided for under Part No. 1 of this quarantine) is included for packing material, or any other purpose, except as food necessary for livestock in transit to the Montana state line; that the shipment is made up of the following: Household goods, farm implements, tools, harness, farm wagons, automobiles, stands of bees, livestock (draw a line through item not included).....

(specify)

feed for animals in transit and.....

.....  
(specify any items not included in previous classification)

.....  
(Shipper or Owner)

Subscribed and sworn to before me.....  
a Notary Public in and for the State of.....  
county of....., this the.....  
day of....., 193.....

.....  
Notary Public.

My Commission Expires....., 193.....

The special certificate from the owner or shipper to be appended to Copy No. 2 of the sworn statement shall be after the following form:

I hereby agree to observe explicitly the requirements of this Montana Quarantine Order with regard to hay or straw (included as stock feed for use before reaching the Montana State line) household and emigrant's goods and other materials, and hereby certify that I have mailed this day one copy of the foregoing affidavit to the Chief of the Division of Horticulture of the Department of Agriculture of Montana, Missoula, Montana.

.....  
(Signature)

6. All railway shipments of livestock, unless shipped in cars that are free of alfalfa hay, all



other hays and cereal straws, throughout all that portion of the journey that is within the State of Utah, the counties of Platt, Converse, Natrona, Fremont, Sweet Water, Uinta, Lincoln, Goshen and Carbon in Wyoming; the counties of Delta, Moffat, Ouray, Routt, Gunnison, Montrose and Rio Blanco in Colorado; the counties of Washoe, Storey, Ormesby, Churchill, Pershing, Lyon and White Pine in Nevada; the counties of Malheur and Baker in Oregon; the counties of Sierra, Plumas and Lassen in California; and all the counties in the State of Idaho, save and except the counties of Lemhi, Latah, Benawah, Shoshone, Kootenai, Bonner, Boundary, Clearwater, Nez Perce and Lewis. All Horticultural Inspectors of the State of Montana are hereby instructed and required to refuse admission into the State of Montana of all such articles as are herein designated from said State of Utah, and from the counties and districts in the States of Wyoming, Colorado, California, Nevada, Oregon and Idaho specifically mentioned in this proclamation, as under quarantine. If any such articles as are herein listed be shipped into the State of Montana, in violation of this quarantine, they must be at once destroyed or returned to the shipper at his expense.

This quarantine shall not be construed to interfere with shipments from the quarantined districts herein enumerated of the agricultural products and articles shipped to the Yellowstone National Park over the Oregon Short Line Railroad for use and consumption in the Park, provided such products and articles carry inspection certificates as herein specified, and provided further that said products and articles shall be used and consumed in the Park and shall not be shipped elsewhere into the State of Montana, nor shall this quarantine apply to shipments of products shipped over the Gilmore and Pittsburgh Railroad

through Montana to Idaho points except as to hay.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State to be affixed. Done at the City of Helena, the Capital, (SEAL) this the 15th day of September, in the year of our Lord one thousand nine hundred and twenty-six.

J. E. ERICKSON, Governor.

C. T. STEWART,  
Secretary of State.

---

State of Montana

A PROCLAMATION BY THE GOVERNOR.

Amendment No. 1 to Quarantine No. 1A

(ALFALFA WEEVIL)

The fact having been determined that the alfalfa weevil *Phytonomus posticus*, has been spread into additional territory, to-wit: the counties of Hot Springs, Albany, Laramie, Niobrara in the State of Wyoming; the counties of Mesa and Garfield in the State of Colorado; the counties of Mineral, Lincoln, Humboldt, Elko, Douglas, Esmeralda and Nye in the State of Nevada; the counties of Jackson and Union in the State of Oregon; the county of Scotts Bluff in the State of Nebraska, and the county of Alpine in the State of California.

NOW, THEREFORE, I, J. E. ERICKSON, Governor of the State of Montana, under and by virtue of the authority conferred upon me by Section 3631 of the Revised Codes of Montana of 1921, do hereby declare and impose the same quarantine and restriction against the above named territory as those imposed in the original alfalfa weevil quarantine No. 1A, which became effective September 15th, 1926.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State to be affixed.

DONE at the City of Helena, the Capital, this, the 27th day of February, in the year of our Lord one thousand nine hundred and thirty.

J. E. ERICKSON,  
Governor.

(SEAL)  
W. E. HARMON,  
Secretary of State.

---

By the Governor of the State of Montana

A PROCLAMATION.

Quarantine No. 2A.

WHEREAS, the fact has been determined that a dangerously injurious plant disease known as wheat rust is disseminated and carried by means of barberry bushes (*Berberis vulgaris*), both of the green and purple form; and

WHEREAS, there is danger of the introduction of this disease into the great wheat fields of Montana through shipments of said barberry bushes and a further dissemination of said wheat rust through the agency of barberry bushes:

NOW, THEREFORE, I, J. E. Erickson, Governor of the State of Montana, under and by virtue of the authority conferred upon me by section 3631 of the Revised Codes of Montana of 1921, do hereby declare and proclaim that a quarantine be and hereby is established against the importation into the State of Montana of barberry bushes (*Berberis vulgaris*) and plants from any point without the State of Montana.

All quarantine guardians and Deputy State Horticultural Inspectors are hereby instructed and required to refuse admission into Montana of any shipments of barberry bushes (*Berberis vulgaris*)

or plants. It shall be the duty of the Deputy Horticultural Inspectors or other quarantine guardians to deport immediately such shipments or destroy them by burning. All expenses incurred in deporting or destroying such shipments shall be paid by the consignor.

Any person who sells or offers for sale in the State of Montana barberry bushes (*Berberis vulgaris*) or plants contrary to this quarantine order shall be liable to prosecution under the laws of the State of Montana.

This order shall take effect and be in force on and after the twenty-ninth day of October, 1926.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State to be affixed. DONE at the City of Helena, the Capital, this the twenty-ninth day of October, in the year of our Lord one thousand nine hundred twenty-six.

By the Governor:

J. E. ERICKSON.

C. T. STEWART,  
Secretary of State.

---

By the Governor of the State of Montana

### A PROCLAMATION

#### Quarantine No. 3A.

WHEREAS, the fact has been determined that the dangerous and injurious disease known as the white pine blister rust (*Peridermium strobi* Kleb) now exists in the western part of the State of Washington and in the Province of British Columbia; and

WHEREAS, there is danger that this disease may be introduced into the valuable forests of

western white pine (*Pinus monticola*) in Montana; and

WHEREAS, it has been further determined that the cultivated black currant (*Ribes nigrum*) and its varieties are the most dangerous alternate host plants of this disease, and that the occurrence of the plant in the State of Montana constitutes a direct menace to the white pine forests:

NOW, THEREFORE, I, J. E. Erickson, Governor of the State of Montana, by virtue of the authority vested in me by section 3631 of the Revised Codes of Montana of 1921, do hereby proclaim the cultivated black currant (*Ribes nigrum*) and its varieties to be a public nuisance in the State of Montana. The destruction of these plants in this state is hereby ordered, and it shall be unlawful for any person to possess, propagate, sell or offer for sale these plants in the State of Montana.

In addition, I do hereby declare and proclaim a quarantine prohibiting the shipment or movement of any cultivated black currant plants (*Ribes nigrum*) and its varieties into or within the State of Montana.

All Horticultural Inspectors are hereby ordered and instructed to intercept, condemn, destroy or return to the shipper any movement or shipment of cultivated black currant into or within the State of Montana, and to condemn and destroy any black currants found growing in the State of Montana. Any violation of these orders will be dealt with according to law.

This order shall take effect and be in force on and after the twenty-ninth day of October, 1926.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State to be affixed. DONE at the City of Helena, the Capital, this the twenty-

(SEAL) ninth day of October, in the year of  
our Lord one thousand nine hun-  
dred twenty-six.

By the Governor:

J. E. ERICKSON.

C. T. STEWART,  
Secretary of State.

---

By the Governor of the State of Montana

## A PROCLAMATION

### Quarantine No. 4A.

WHEREAS, it has been determined that two dangerous and destructive pests of the potato (Potato Eelworm—*Heterodora radiciola* and Potato Tuber Moth-*Phthorimaea operculella* Zeller) occur and are prevalent over an indeterminable area in the State of California: and

WHEREAS, there is great danger of the introduction of these pests into the potato fields of the State of Montana:

NOW, THEREFORE, I, J. E. Erickson, Governor of the State of Montana, by virtue of the authority conferred upon me by section 3631 of the Revised Codes of Montana of 1921, do hereby proclaim and establish a quarantine prohibiting the entry into the State of Montana of all potatoes from the State of California, or that may have been in the State of California, except under the following conditions:

Each shipment must be accompanied by a certificate signed by a duly authorized inspector of the State of California, Department of Agriculture, stating (1) that he has inspected the field in which the potatoes were grown and found it, to the best of his knowledge, free from the Potato Eelworm and from the Potato Tuber Moth; and (2) that he has also made an inspection of the



potatoes when ready for shipment and that he has found them apparently free from any infestation of any stage in the development of the pests mentioned above. One copy of this certificate must be attached to the bill of lading and another sent to the Division of Horticulture, State Department of Agriculture, Missoula, Montana.

All inspectors of the Department of Agriculture are hereby required and instructed to refuse admission into the State of Montana of any shipment of potatoes which have originally or which have been in the State of California, unless after inspection they are found to be apparently free from any infestation by Potato Eelworm or Potato Tuber Moth and are accompanied by a certificate as above mentioned.

If any such potatoes as mentioned above come into the State of Montana in violation of this quarantine they must at once be destroyed or returned to the shipper at his expense. Any violation of these orders will be dealt with according to law.

This quarantine shall take effect on and after this date.

IN WITNESS WHEREOF, I have here-  
unto set my hand and caused the  
Great Seal of the State to be af-  
fixed. DONE at the City of Hel-  
ena, the Capital, this the twenty-  
(SEAL) ninth day of October, in the year of  
our Lord one thousand nine hun-  
dred twenty-six.

By the Governor:

J. E. ERICKSON.

C. T. STEWART,  
Secretary of State.

# MONTANA INSPECTORS AND INSPECTION POINTS—1930.

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|  |  |
|--|--|
| Billings.....                          | Bancroft, R. E.  |
|  | } Zwisler, Herbert<br>Isaac, E. E.<br>Harrington, F. M.<br>Starring, C. C. |
| Bozeman.....                           |  |
|  |  |
| Butte.....                             | Fossum, J. A., 1117 Nevada St.   |
| Chinook.....                           | (Potatoes) Raas, J. M.   |
| Deer Lodge.....                        | Johnson, A. W.   |
| Glendive.....                          | Auble, C. P.   |
| Great Falls.....                       | Clark, Fred A.   |
| Hamilton.....                          | Young, R. O.   |
| Hamilton.....                          | Pollinger, Lowell  |
| Helena.....                            | (Potatoes) Miller, George  |
| Kalispell.....                         | Kauffman, H. N.  |
| Malta.....                             | (Potatoes) Runge, E. W.  |
| Miles City.....                        | Knight, George A.  |
| Missoula.....                          | Sargent, Harry   |
| Polson.....                            | Fosse, Theo. S.  |
| Snowden (Express) (Nursery Stock)..... |  |
|  | Dickey, J. W.  |
|  | (Mail) Ft. Buford, N. D.   |
| Waterloo.....                          | (Potatoes) Dodds Guy C.  |

## DIVISION OF HORTICULTURE.

Geo. L. Knight, Chief.

June, 1930.

Missoula, Montana.

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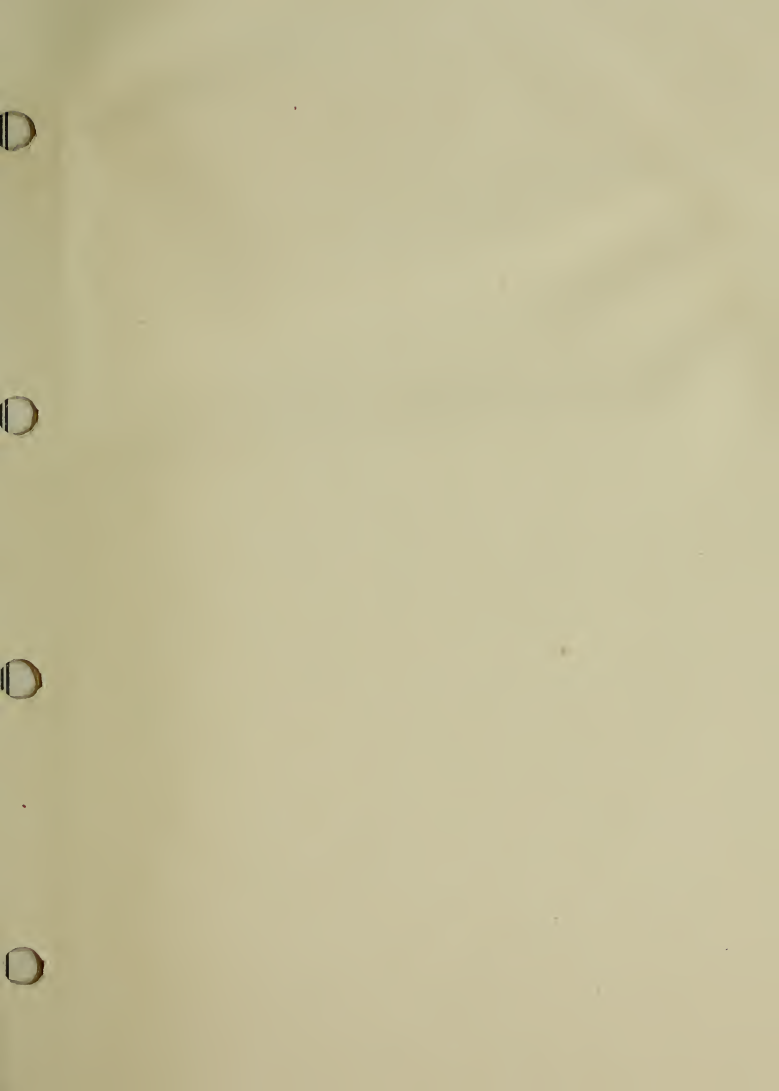
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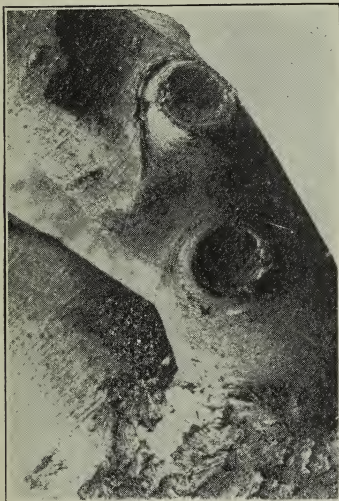






# WOUNDED TREES = NEED PROPER = DRESSING

== OR THEY WILL ==  
**WITHER—BREAK and DIE**



Two Cuts after being treated many months with

## **CORONA TREE WOUND DRESSING**

Notice smooth callous and no injury at either top or bottom of wounds—no checking—and dressing in excellent condition, still giving maximum protection.

**CORONA CHEMICAL DIVISION**  
MILWAUKEE, WISCONSIN

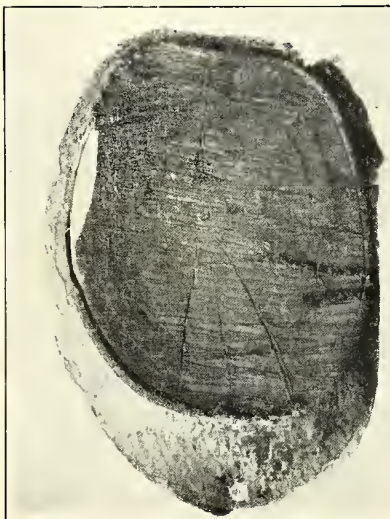
During the last few years a great many different substances have been used on the wounds of trees. It is doubtful if any of these compounds could be considered entirely satisfactory. Most of them have had the composition of paints intended primarily for protecting dry wood from deteriorating when exposed to the weather. A great many of them have simply been the ordinary house paint.



Two pruning wounds showing injury due to cheap poor dressing.



Another treated wound showing injury due to poor dressing.



Transverse wound showing injury due to poor dressing. Wound treated three weeks after pruning. Notice checking.

An ideal wound dressing must not only have the qualification of a good paint, but it must also permit living host cells to function normally in healing wounds, kill parasites that may be present and prevent others from entering the wound. A wound dressing should be able to be used without causing injury to the living tissues. All natural and artificial openings must be filled with an insoluble substance that will keep its virtues over a long period of time.



Two lower wounds treated with Corona Tree Wound Dressing. Upper wound untreated. Notice the quick healing over where Corona Dressing was used.

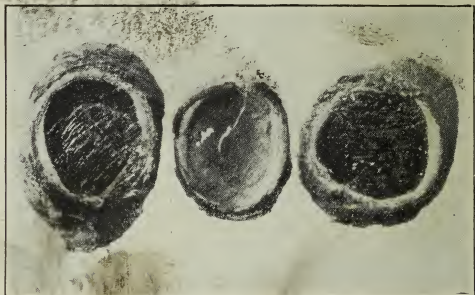


Showing excellent callous and no injury but blistering leaving center exposed. This indicates a fair dressing but very cheap paint—no durability and therefore no further protection.

Our laboratories have undertaken a thorough-going investigation of the different wound dressings with a view of recommending to the public a material that has all the properties a wound dressing should possess—namely, safety to the living tissues, prevention of wood decay, active aid in healing, durability and protection.



Corona Tree Wound Dressing actually helps the tree in its healing process and prevents the entrance of wound destroying organisms. It was chosen from thousands of trials and comparisons with other dressings.



Middle wound untreated showing checking and poor healing at top and bottom. Outside wounds treated with Corona Tree Wound Dressing, showing good callous all around—no checking—excellent durability and a lasting protection until healed over.

It can be safely used on rabbit or gopher injury. It will not kill any live tissue which the rodents have left. If you want to compare Corona Tree Wound Dressing with other paint or other dressings, do so by removing elliptical strips of bark one and one-half inches long by three-quarters of an inch wide from a one-inch apple limb. This experiment is best performed about the first of June when bark peels rapidly. Examine it three weeks later and notice the superiority of Corona Tree Wound Dressing.

The best way to use Corona Tree Wound Dressing is to make pruning cuts parallel to a branch. Avoid stubs. Apply Wound Dressing immediately with a clean brush. Warning—do not thin with turpentine.



